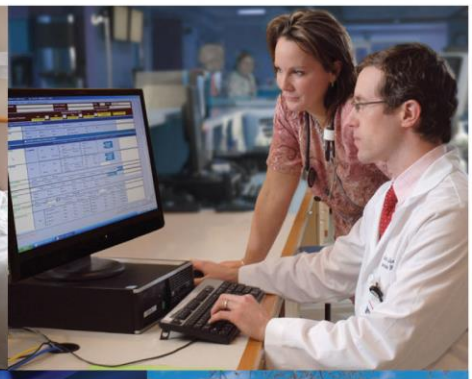
COMPASSION • ADVOCACY • QUALITY

EMPATHY • DEDICATION • CARE • EXTRAORDINARY








2014

EVERYDAY • SERVICE • TEAMWORK • COMMUNICATION

COMMITTED TO QUALITY, COMMITTED TO YOU.

Calvert Health System
Calvert Memorial Hospital
Tradition. Quality. Progress.

Performance Improvement Quality and Safety Annual Report

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An Executive Summary

Our Journey to High Reliability

Leadership Overview

Health care has often been described by many experts as among the most complex industries in the world. Now frequently compared to other highly complex industries such as aviation, nuclear energy, and strategic defense, health care shares many of the challenges to perform with high reliability and optimally under many stressful situations.

The Joint Commission has recently published a new Patient Safety chapter in their accreditation manual. In these new accreditation standards are embedded the challenge to all healthcare organizations to develop and implement a path to high reliability. The definition of a High Reliability Organization (HRO) is an organization or industry that has succeeded in creating systems that prevent catastrophes from occurring despite a risky and complex environment where "normal" accidents can be expected to occur. The goal, of course, is to have fewer than expected rate of accidents or, in the hospital's case, "patient harm events."

This will only happen with continued efforts to change the culture, engage patients and families and design safer systems and procedures. High reliability organizations are characterized by a total preoccupation with the possibility of "failure" or harm. It is ingrained so deeply that every staff member in the organization is constantly asking the question: what can go wrong and how can we prevent it from happening? So what do we need to do to develop this culture?

Develop and implement a deep understanding of process improvement across the organization. Be transparent – talk to the patients and families. Learn how to engineer fail-safe and recovery modes for all important processes around patient care delivery. And lastly, turn to the individuals with the most expertise on a particular matter to lead decisions and process improvement irrespective of their rank or position in the organization.

Patient safety is more than a *goal* at Calvert Memorial Hospital; it is our number one priority. CMH acknowledges our work carries risk of harm to our patients and accepts the challenge to reach our goal of zero serious safety events.

Today, our federal government is taking unprecedented steps to reform health care. Healthcare organizations are challenged to think out of the box, by re-engineering processes which allow us to trim costs while improving quality and safety outcomes for our patients and community. From 2009 through 2014 we experienced an 86.2% reduction in serious safety events (58 to 8). Each year we strive to demonstrate we are becoming a safer healthcare organization; we are chasing zero.

The challenge ahead has not changed; we must perform at the highest levels possible with less financial resources than in past years. Across the nation, quality, patient safety and patient perception scores are incrementally improving.

The culture of the institution must be one that puts the patient first and foremost. This kind of work requires an extraordinary effort. It involves persuading everyone to embrace the mission and vision of the organization. Facing these challenges requires the hospital family to reach out to the community. It is time to show the community what we are all about and, most importantly, how proud we are to have achieved the levels of quality and patient safety to date. It is time to partner together to leap to the next phase.

Awards and Recognition

2014 was a year to be proud for Calvert Memorial Hospital. Years of dedication to quality outcomes and patient safety resulted in a number of prestigious distinctions:

- ***Delmarva Excellence Award*** from the Delmarva Foundation, our quality improvement organization (QIO) for the 4th year in a row and for the 7th time since 2003
- Named a Joint Commission ***Top Performer*** for Core Measures: heart failure, acute myocardial infarction, pneumonia and surgical care improvement project, an honor bestowed on no other organization in the greater Southern Maryland region (for all 4 sets)
- ***Gold Plus Stroke Award*** by the American Heart Association and Get-with-the-Guidelines for the 4th year in a row
- ***VHA Clinical Excellence Award*** *for outstanding results in medication error reduction, readmission reduction, fall reduction and our participation in the CMS Partnership for Patients collaborative.*
- Named ***Number One Safest Hospital*** in the greater metropolitan region by Consumer Reports for outcomes publicly reported from 2012 through early 2013
- Recognized by the state as having the highest survival rate among Maryland hospitals.

Patient Experience

Our patient experience team continues to strive to achieve the 75th percentile in patient satisfaction as measured on the HCAHPS consumer survey and our emergency and urgent care patient surveys. We continued our relationship with HealthStream to survey patients at random from throughout the system to evaluate opportunities for continued improvement and growth.

A multi-disciplinary Patient Experience Team meets twice a month to set goals, develop strategies to achieve those goals and monitor progress. In 2014, the team focused our efforts on communication, discharge information and transition of care. Highlights include:

- Revamped discharge processes to include post-discharge follow-up phone calls, the use of pink folders to distinguish discharge information and a discharge task force to look at continual process improvement resulting in top quartile results for 2014.
- House-wide mandatory re-education on the principles of communication using the Studer AIDET model coupled with reinforcement by Safety Coaches and Department Leaders resulted in steadily increasing communication scores on HCAHPS (from 76 percent in 2011 to 82 percent in 2014 of patients giving CMH a top box score on nurse communication). Annual scores are approaching our goal of the 75th percentile.
- Transition-to-home efforts, led by our Integrated Care Management Department, resulted in sustained scores exceeding the 75th percentile throughout 2014.

Core Measures

Our *Quest for Core Quality* program continues to be a source of pride for the organization. Our dedicated, multi-disciplinary team will not rest until we achieve 100% compliance for all our quality metrics. This year our hard work resulted in exemplary care for our patients. Some of the highlights are as follows:

- 100% Compliance for all metrics in Heart Failure for 2014
- 100% Compliance for all metrics in Acute Myocardial Infarction for 2014
- Attainment of benchmarks set by the Maryland Health Care Commission (MHCC) in 21 of 26 metrics
- Improvement or 100% compliance in 24 of 26 Metrics!

Stroke

Similar to our Core Measures program, our Stroke Team continued to persevere in providing excellent care for our stroke patients and their families. Not only do we have exemplary outcomes, earning us the distinctions previously noted, we also have a strong support group for patients and caregivers offering support to families after a stroke. Some examples of accomplishments of this program are:

- Met or exceed all benchmarks for quality outcomes related to stroke
- Improvement or attainment of 100% compliance in 13 out of 15 metrics
- 100% compliance in nine of those metrics
- Community education and involvement in:
    - Our schools
    - Diabetic Expo/Women's Health Expo
    - Educational offerings for professionals and community members at CMH
    - Collaboration with our Health Ministry Team

National Patient Safety Goals (NPSGs)

The evaluation and implementation of initiatives in support of The Joint Commission's NPSGs is one of the most important things we do for our patients. We regularly measure these safety processes to ensure compliance with these critical safety goals. We embrace the philosophy that NPSG adherence saves lives and prevents harm. We continue to save lives and prevent harm by achieving the following:

- 100% compliance or improvement in 16 of 17 metrics we report to our Board of Directors
- We had 22 mislabeled lab specimens out of 268,442 in 2014; all of which the processes in place to identify mistakes and protect the patients were successful. This is consistent with our 2013 compliance.
- Improvement in reporting of our laboratory red panic values to providers
- Improvement in our medication reconciliation process
- Zero central line-associated bloodstream infections, improved from 2 in 2013.
- Zero catheter-associated urinary tract infections

Organ Donation

Our partnership with our organ procurement organization, Living Legacy Foundation (LLF), continues to strengthen year after year. We are fortunate to have an active LLF liaison who is the perfect partner to our organ donation champions. Our targets, as per LLF, are 50% conversion rate for organs, 25% for tissues, and 100% compliance for timely referrals (within one hour of death). Our partnership and continuous process improvement resulted in:

- 33% tissue conversion rate. Although this is down from last year, we recognize that this rate is controlled by the patients' family. We continue to provide education to our staff so they are able to support the families during this difficult time.
- Timely Referral Rate of 94%. We struggled with timely referrals during the 2nd and 3rd quarters. Additional education was provided to the staff and our LLF representative attended staff meetings. This greatly improved our rate in the 4th quarter.
- Timely Referral Rate of 100% in 4th quarter 2014

Risk Management

Risk management at CMH is everyone's job and we all take pride in protecting ourselves and our patients. Components of the risk management program are vast. Some of the highlights are:

- The Safety Coach team continues to be passionate and dedicated to patient safety with additional training allowing us to expand our team. Over 2600 safety observations were reported and the team acted as a focus group to help develop action plans for improving our Hospital Survey on Patient Safety (HSOPS) results.
- The online adverse event reporting system, The Safety Net, had approximately 1,700 events reported in 2014. Since its inception in 2011, over 6000 events have been reported to date. Reporting and monitoring of trends allows opportunity to improve processes and reduce harm.
- The annual Patient Safety Fair had an Olympics theme and provided additional learning opportunities for environmental fire safety, NPSGs, incident reporting and medication safety. The staff took a pledge for annual commitment to patient safety.
- Identified trends in preventable pressure ulcers, possibly due to increased recognition and reporting. The wound care team collaborated with L2 and L3 to develop an action plan, which is evolving as we continue to do robust reviews and analysis of each incident.
- There was a decrease in serious safety events from 12 events in 2013 to 8 events in 2014.
- One Level I injury was reported to Maryland's Office of Healthcare Quality (OHCQ) - a Stage III Pressure Ulcer. Root Cause Analysis readily accepted.
- No sentinel events in 2014
- Two claims filed in 2014
- The complaint reporting process has been expanded to include billing disputes and we have implemented a weekly huddle to facilitate timely resolution.

Infection Control

Our infection prevention program is stronger than ever. Our progressive infection control practitioners creatively engage our leaders and staff to drive ever-improving outcomes:

- Successful Hand-Hygiene Fair with over 220 participants.
- Engagement with the Volunteers Hospitals of America (VHA) and Maryland Patient Safety Center (MPSC) to work on hand hygiene collaboratives—achieving and exceeding the state benchmark of 90%.
- Zero ICU CLABSIs, CAUTIs and VAEs. Utilization rates in all areas below the National Healthcare Safety Network (NHSN) benchmark.
- Zero CAUTIs and CLABSIs for L3 and L2—maintained below state average in device utilization through process improvement.
- Zero hospital-acquired MRSA bacteremia.
- Bladder Scanning Protocol implemented to reduce foley catheter use and reinsertion, improving overall patient safety.
- Surgical Site Infection Prevention Subcommittee's efforts reduced overall SSI rates by 25% in 2014 and orthopedic surgical site infections by 30%.
- Ebola / Emerging Diseases Response Plan developed and implemented for the hospital in response to the largest Ebola outbreak in history, including rapid implementation of registration screening and Emergency Department isolation procedures.
- Trained over 150 personnel on personal protective equipment (PPE) donning and doffing and Ebola isolation procedures in preparation for caring for suspected or confirmed cases of Ebola.

- MRSA/MSSA PCR testing implemented for rapid identification of colonized patients for surgical and intensive care units, resulting in quicker implementation of isolation and reduction in potential MDROs transmission.

Core Quality and Safety Goals for 2015

- Reduce patient harm – continue to chase zero
- Prevent unneccessary or avoidable hospital utilization by reducing potentially avoidable readmissions and emergency department utilization
- Reduce hospital-aquired infections, focusing on surgical site infections, central line infections, catheter associated infections and C-Difficile transmission
- Engage patients and families in the Patient Advisory Board
- Reduce adverse medication events
- Study the impact of clinical alarms and alert fatigue and develop plans for re-engineering procedures/process
- Participate in the Surviving Sepsis Collaborative of Maryland to reduce mortality and morbidity associated with Sepsis
- Maintain mortality rate below state expected rate
- Reduce blood-borne exposures to staff
- Maintain a composite Core Measure score of 97% or greater
- Implement strategies to prevent pressure ulcers and deep tissue injuries
- Continue to implement strategies to improve the patient experience and patient perception
- Continue to assess and identify barriers to patient flow throughout the organization. Focus on length of stay in the Emergency Department and time from admission to patient in a bed on a nursing unit.
- Reduce Maryland Hospital Acquired Conditions below expected ratios established by the HSCRC.
- Implement Josie King Foundation Patient Safety Curriculum

Patient Experience

PLAN

CMH Healthcare Team will provide the optimal experience for our patients

DO

2014:

- ✓ Improve the overall patient experience by re-focusing on organization-wide communication strategies. Our goal remains the 75th percentile of hospitals in the HealthStream database.

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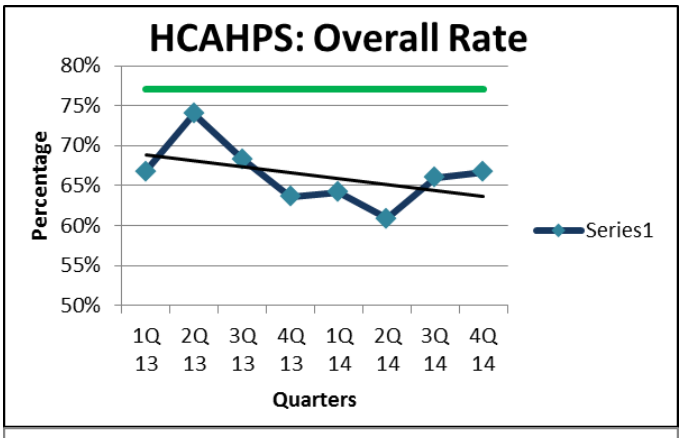

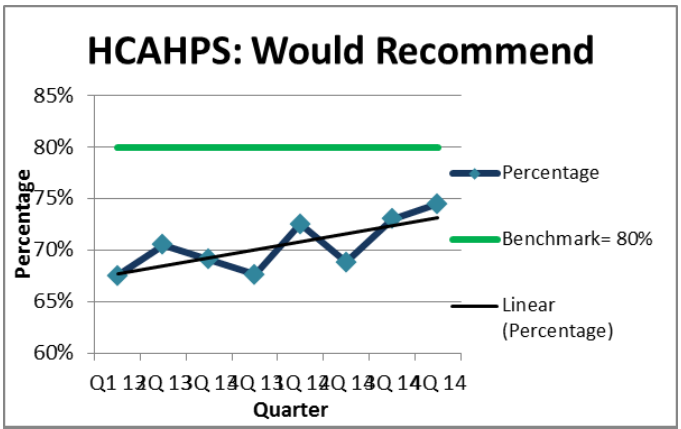

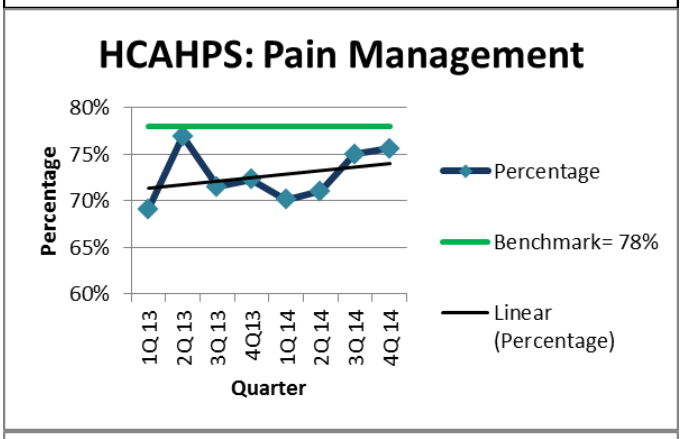

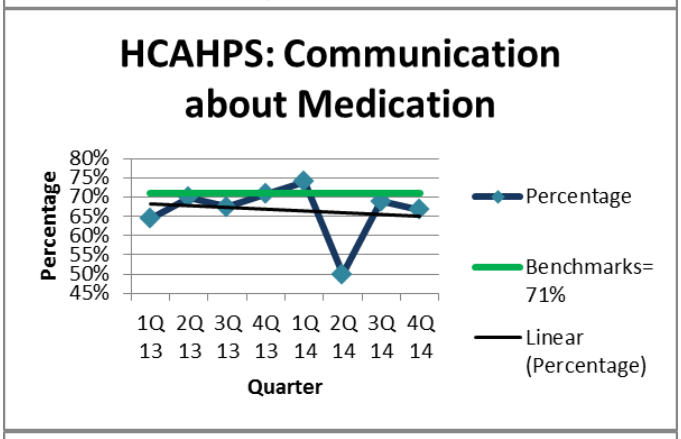

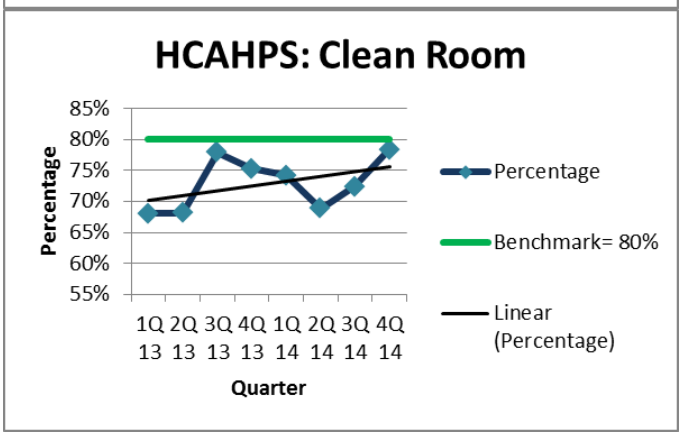

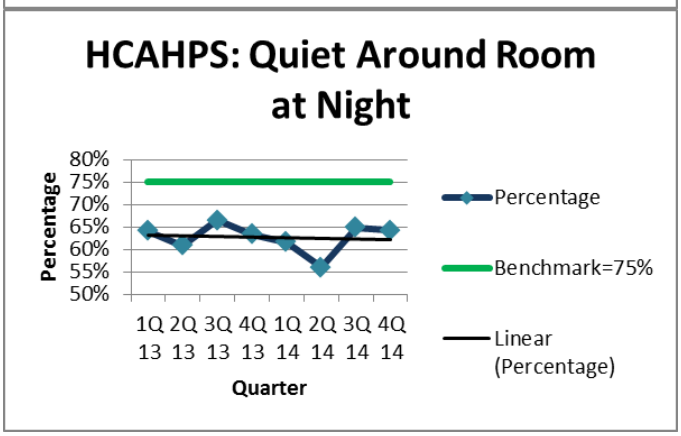

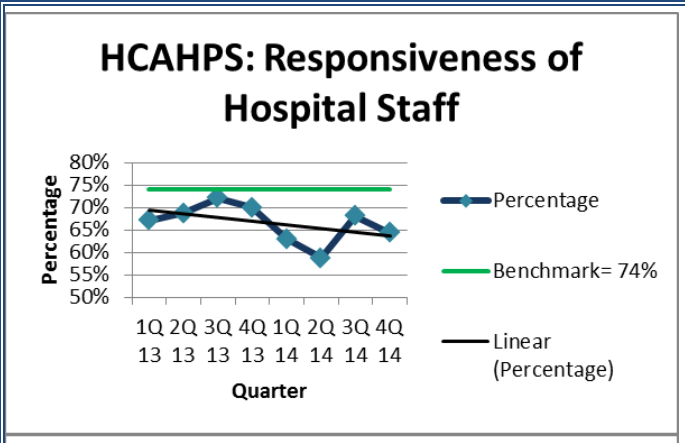

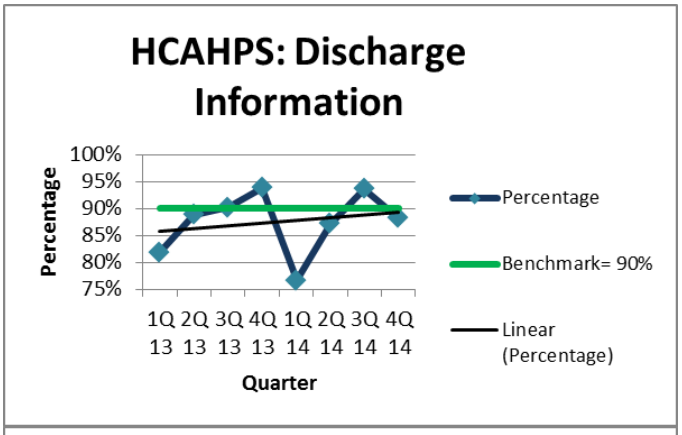

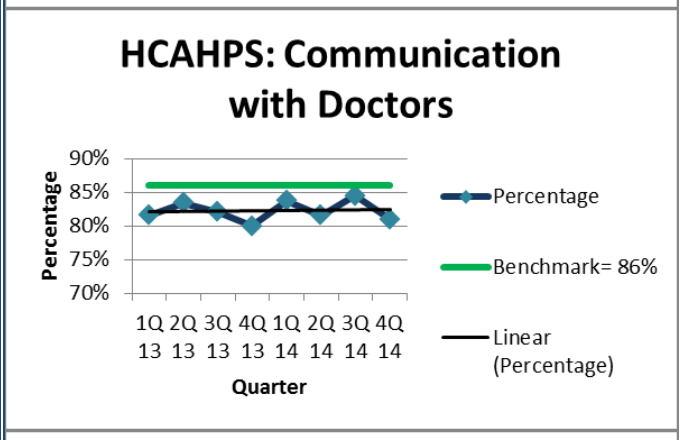

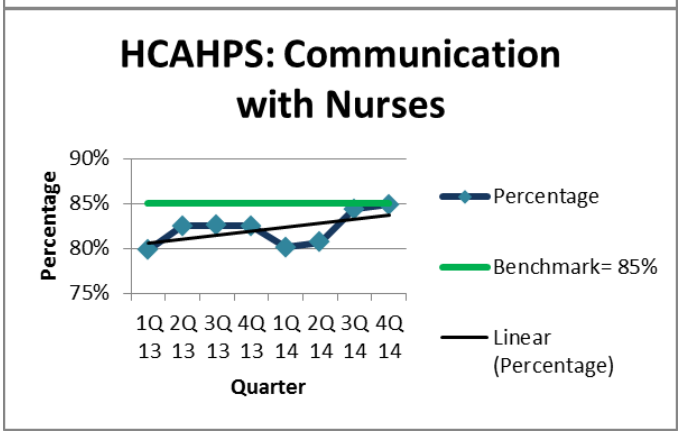

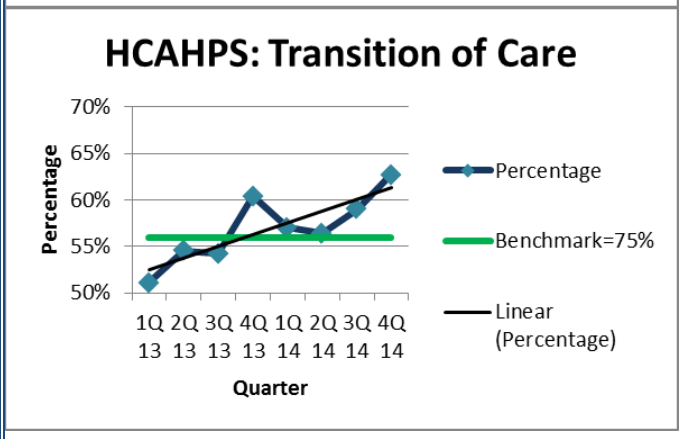

ACT

2014:

- ✓ Provided mandatory health system-wide refresher training on AIDET with a new additional focus on the “no-pass zone”.
- ✓ Clinical staff refresher on HCAHPS through NetLearning.
- ✓ Pilot program developed by pharmacy and nursing to use admission nurses for pain management education. Revised pain education tools. Revised NetLearning pain management education for clinical staff.
- ✓ Selected GetWell Network as the patient interactive tool for the hospital and contracted with the vendor for equipment and software and held kick off meeting to plan installation.
- ✓ Revised pink discharge folders to include additional information. Task force created to review discharge process.
- ✓ Integrated Care Management assumed responsibility for discharge phone calls to improve work flow.

Core Measures

PLAN

Achieve optimal patient outcomes in Acute Myocardial Infarction (AMI), Heart Failure (HF), Community-Acquired Pneumonia, Surgical Care Improvement Project (SCIP), and Children's Asthma Care, Immunizations through evidence-based, best practice

DO

2014:

- ✓ Strive to meet benchmarks for core measures as per the Maryland Health Care Cost Commission to ensure best possible outcomes for patients and to avoid negative financial impact via Quality Based Reimbursement
- ✓ Achieve Delmarva Award for fourth consecutive year
- ✓ Achieve recognition as a TJC Top Performing Hospital for second consecutive year
- ✓ Continue improvement to our Venous Thromboembolic (VTE) and Influenza Immunization (IMM) sets
- ✓ Prepare for Perinatal (infant) and Stroke sets

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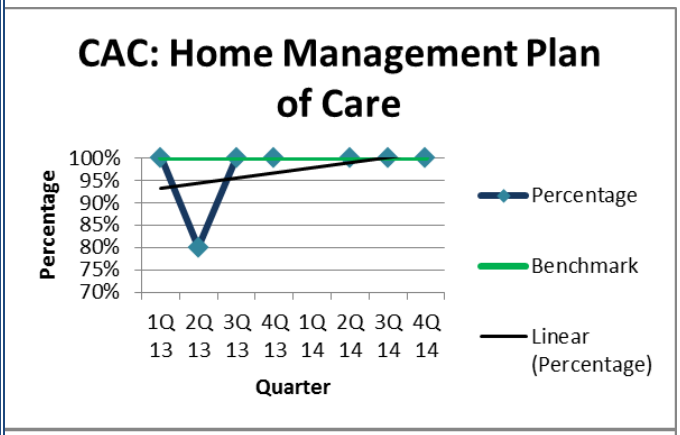

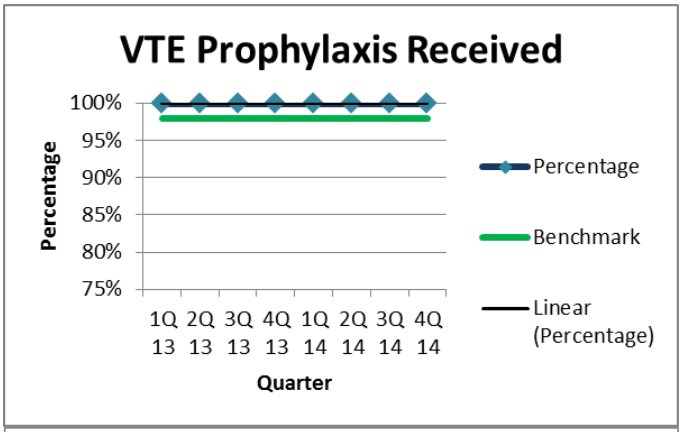

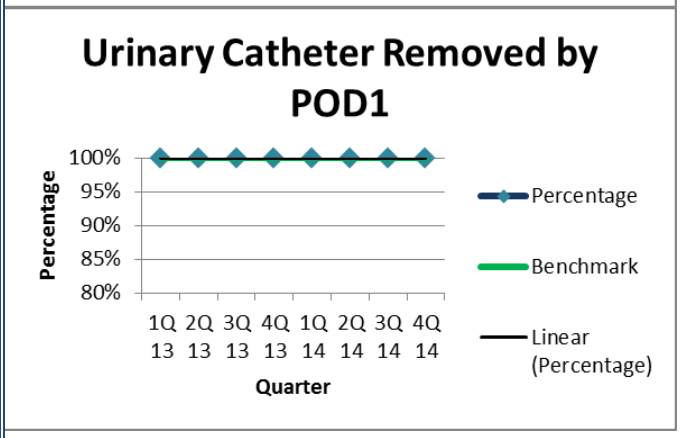

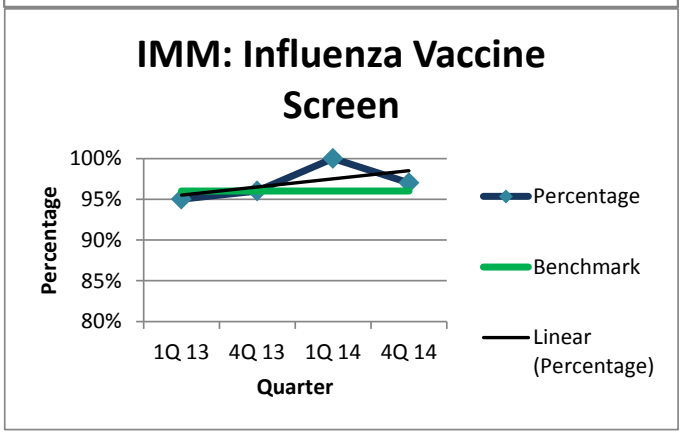

ACT

2014:

- ✓ Obtained Delmarva Foundation Award for Excellence in Core Measures
- ✓ Recognized as a Joint Commission Top Performing Hospital
- ✓ Core Measures coordinator informed team of new Perinatal Care (Infant) measures
- ✓ Concurrent review of charts for all measures
- ✓ Letters sent to medical *and* nursing staff quarterly for outliers
- ✓ Quality Outcomes Coordinator to attend bi-monthly orientation for nursing to educate about core measures
- ✓ Nursing participated in a NetLearning activity regarding Core Measures

Stroke

PLAN

Provide evidence-based practice for patients with the diagnosis of acute stroke

DO

2014:

- ✓ Achieve Gold Plus Designation from the American Heart Association (AHA) and Get-with-the-Guidelines (GWTG)
- ✓ Obtain Target Stroke Designation from AHA & GWTG
- ✓ Continue improvement in our percentage of door to t-PA time within 60 minutes

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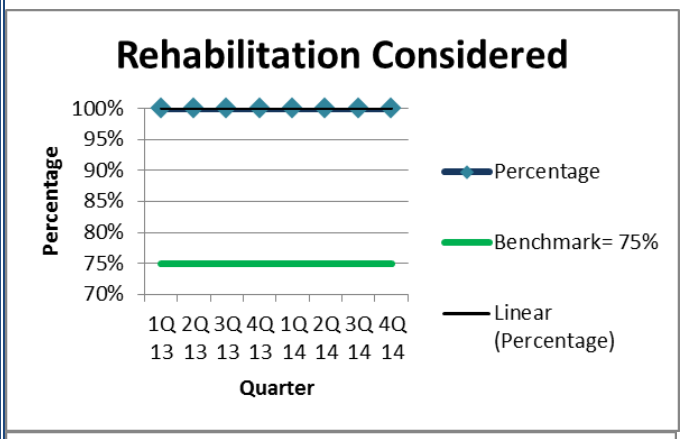

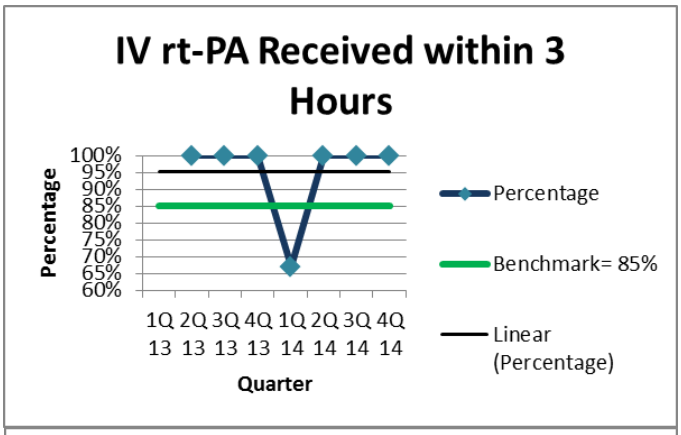

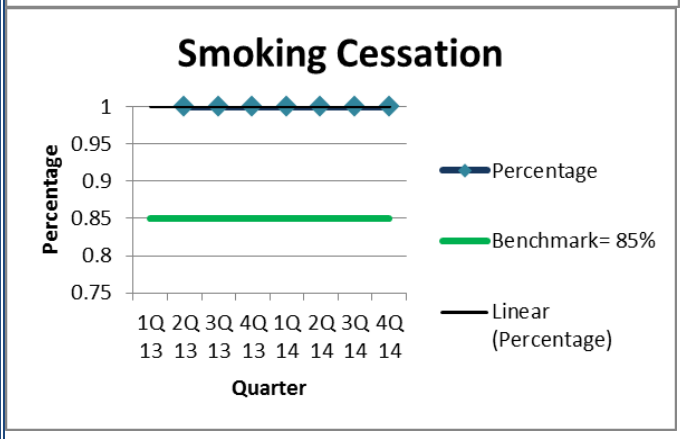

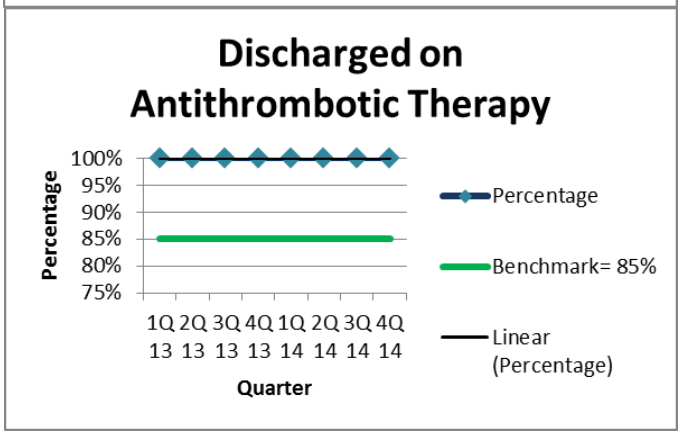

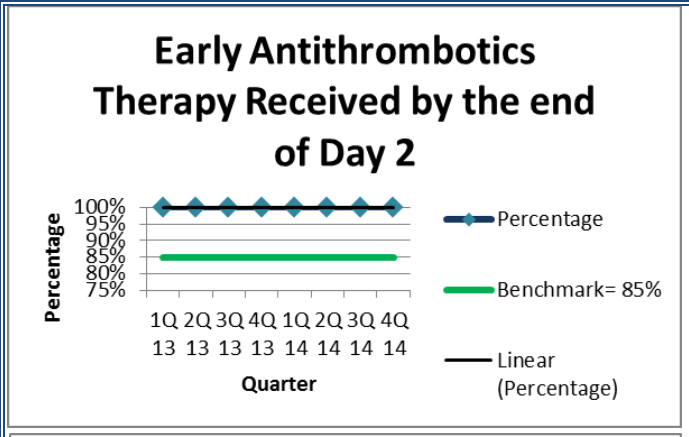

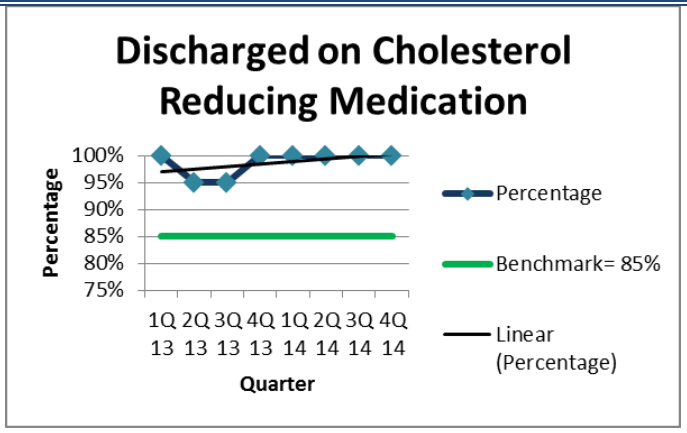

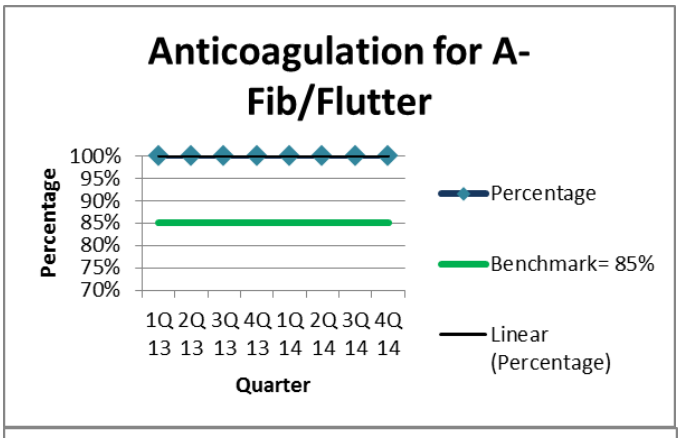

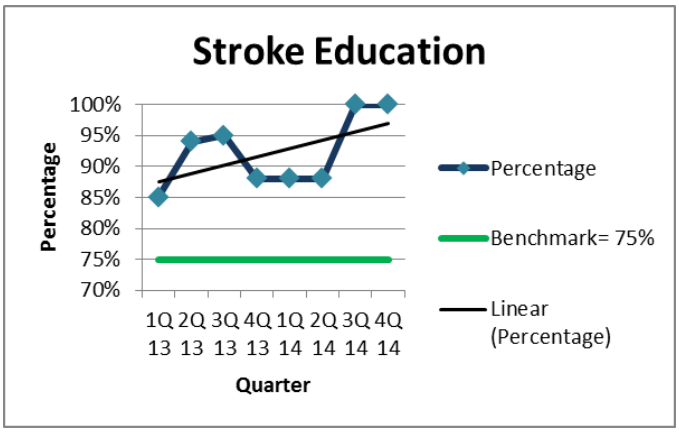

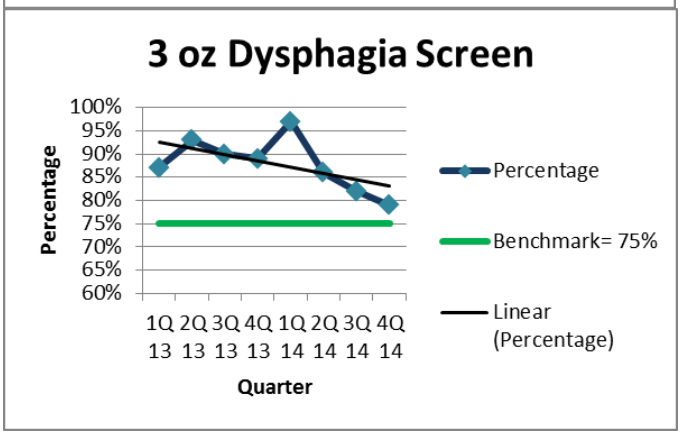

ACT

2014:

- ✓ Daily chart reviews completed by Outcomes Facilitator and Stroke Program Coordinator for concurrent review of CVA/TIA patients
- ✓ Medical and nursing staff formally notified when out of compliance
- ✓ Stroke Program Coordinator attended the Biomedicine Meetings with high school educators to provide student awareness of stroke
- ✓ Stroke Program Coordinator lectured at high schools with Biomedicine students on signs and symptoms of stroke and risk factors
- ✓ Stroke Program representative participated at the annual Diabetes Fair, Heart Healthy Expo and Women's Health Week Expo.

- ✓ Continued to provide speakers for Stroke Support Group to increase awareness of healthy habits to improve outcomes
- ✓ Reviewed each t-PA case to identify improvements to assist in decreasing door to t-PA administration time
- ✓ Created a worksheet in ED to help capture real time documentation during t-PA administration
- ✓ Increased door to t-PA time within 60 minutes in 50% of cases meeting the Target Stroke Goal

National Patient Safety Goals

PLAN

Provide care to our patients in a safe manner by implementing most current recommendations from *The Joint Commission* on National Patient Safety Goals

DO

2014:

- ✓ Complete a full risk assessment on all clinical alarms used within the organization
- ✓ Additional staff training on AIDET and No-Pass Zone to improve staff-to-patient communication as well as that from staff-to-staff
- ✓ In collaboration with the Nursing Shared Governance Council, evaluate and improve the process for reporting laboratory red panic value results to providers and documenting the notification
- ✓ Expand VMAR to other areas of the facility
- ✓ Add Medication Reconciliation Technologist to ER to improve the medication reconciliation process
- ✓ Expand the Safety Coach Program for the continuation of a robust feedback process of safety observations
- ✓ Evaluate and improve the Universal Protocol process in all areas of the facility
- ✓ Expand technology to further support labeling medications/solutions on/off the sterile field
- ✓ Improve hand hygiene compliance
- ✓ Reduce Surgical Site Infections
- ✓ Reduce CLABSI for both ICU and Medical-Surgical units

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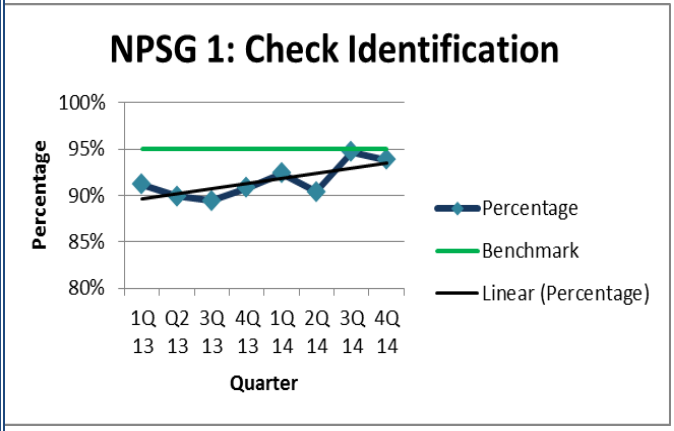
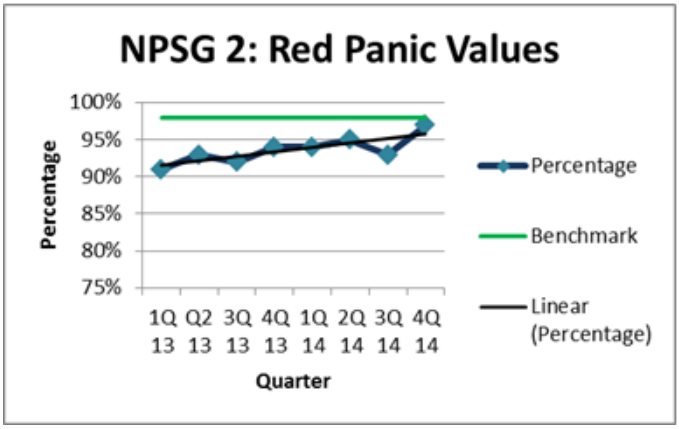
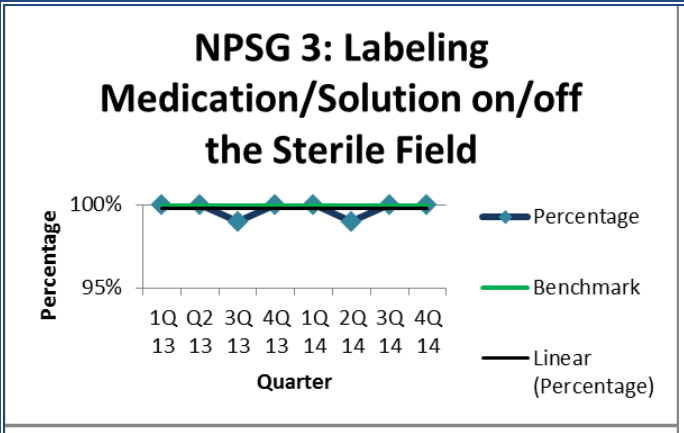
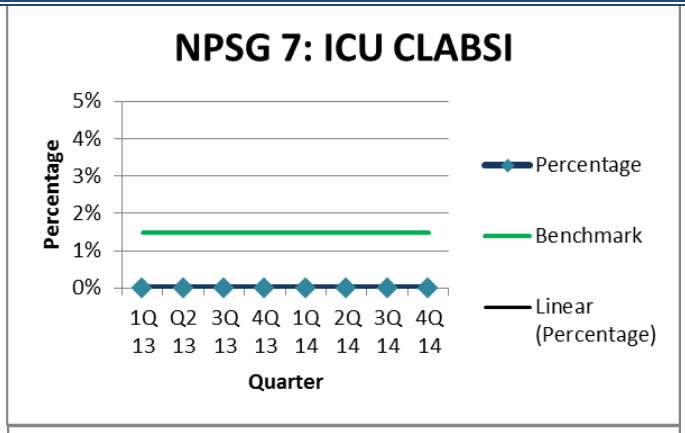
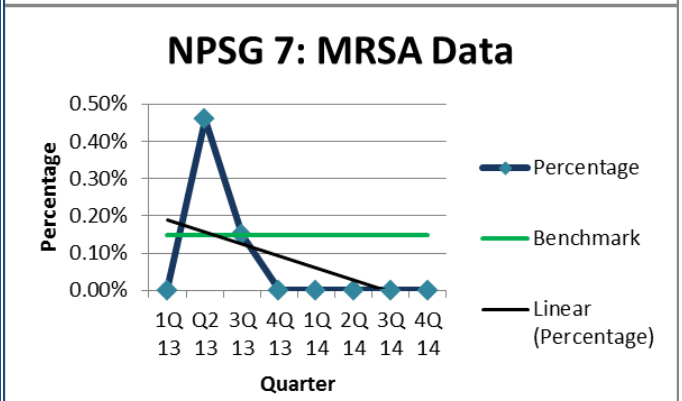
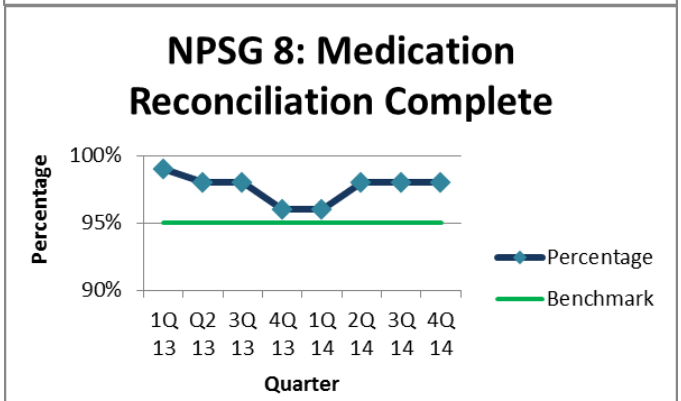


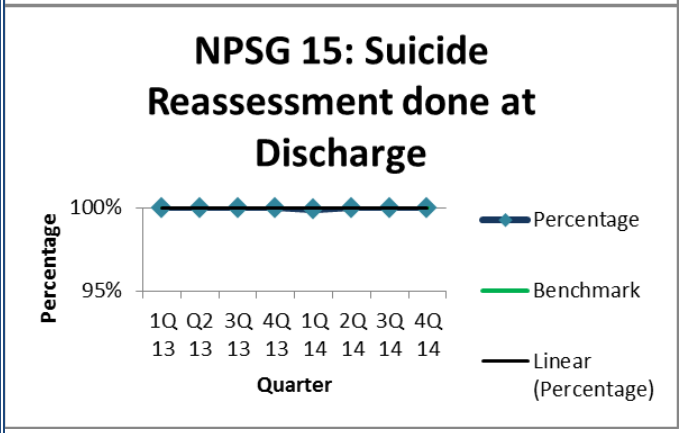


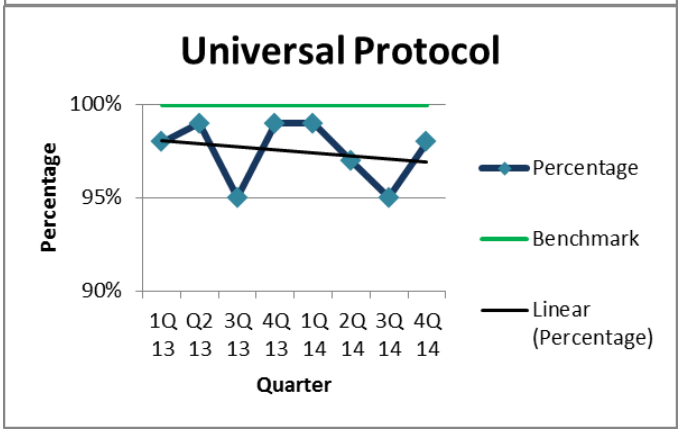












ACT

2014:

- ✓ Clinical alarm risk assessment completed and a priority list developed to guide the next step for improving alarm safety within the organization.
- ✓ 6th Annual NPSG Fair: Olympic-themed fun and learning to highlight safety initiatives. Approximately 300 staff attended.
- ✓ A new red panic value reminder was added to the unit work areas to assist staff with remembering to document red panic value notification. Continue further evaluation of technology advancement to assist with the reporting process.
- ✓ VMAR expanded to the Pain Clinic. Continue further implementation of VMAR in other areas of the organization.
- ✓ Medication Reconciliation Technologists added to the ER 72 hours per week. Ongoing evaluation and refinement of the technologist role to further improve the process.

- ✓ Additional Safety Coach training was held in August to add 8 Safety Coaches to the team.
- ✓ Safety Coaches performed over 2600 observations for AIDET, SBAR, hand hygiene, PPE compliance and patient identification.
- ✓ House-wide pledge to the time-out process with over 200 clinical staff making the commitment to a safe-time out for each patient, each procedure, each time. Annual time-out day planned for upcoming years.
- ✓ Added codonics technology to further support labeling of medications on/off the sterile field.
- ✓ Hand Hygiene Fair held in May 2014.
- ✓ Overall hand hygiene annual compliance improved slightly to 89.5%.
- ✓ No CLABSIs in 2014.

Risk Management Safety Score Card

Serious Safety Events		1st Q 14	2nd Q 14	3rd Q 14	4th Q 14	Annual	2013
	Surgical Site Infections	1	2	2	0	5	12
	Central Line Infections (ICU)	0	0	0	0	0	0
	Other Nosocomial Infections	0	0	0	0	0	0
	Medication Errors						
	Moderate/severe temporary harm	0	0	0	0	0	0
	Permanent Harm	0	0	0	0	0	0
	Required life-sustain. Intervent.	0	0	0	0	0	0
	Death	0	0	0	0	0	0
	Surgical Complications	0	1	0	0	1	0
	Wrong Surgical Procedure	0	0	0	0	0	0
	Unexpected Mortality	0	0	1	0	1	2
	Inpatient Falls With significant Injury	0	0	0	0	0	1
	Other	0	0	0	1	1	1
	Total:	1	3	3	1	8	16
	Patient Days (includes Obs, excludes NB/TCU)	6129	5748	5414	5470	22761	24465
	Emergency Department Visits	9870	10276	10765	10561	41472	40467
	Inpatient Admissions (includes Obs, excludes NB, TCU)	1975	1892	1948	1984	7799	7836
	Total Number of Surgeries	1158	1256	1140	1145	4699	10025
	Serious Safety Event Rate (patient days)	0.02%	0.05%	0.06%	0.02%	0.04%	0.07%
	SSI + Surgical Complication Rate (# of surgeries)	0.09%	0.24%	0.18%	0.00%	0.13%	0.12%

** Serious Safety Event (SSE) = Death, severe or moderate, permanent harm, or moderate to severe temporary harm

** Medication Errors include only Categories F - I (patients who had some type of moderate to severe harm); does NOT include ADRs

** MRSA/VRE reported per NHSN definition

** Surgical Site infections reported Wound Class I and II only

** Surgical Complications that cause serious temporary or permanent harm or return to surgery

**Unexpected Mortality was defined based on the State of Maryland Definitions for reporting

**Inpatient Falls with Injury is defined based on State of Maryland requirements for reporting.

** Data excludes TCU

Surgical Site Infections

PLAN

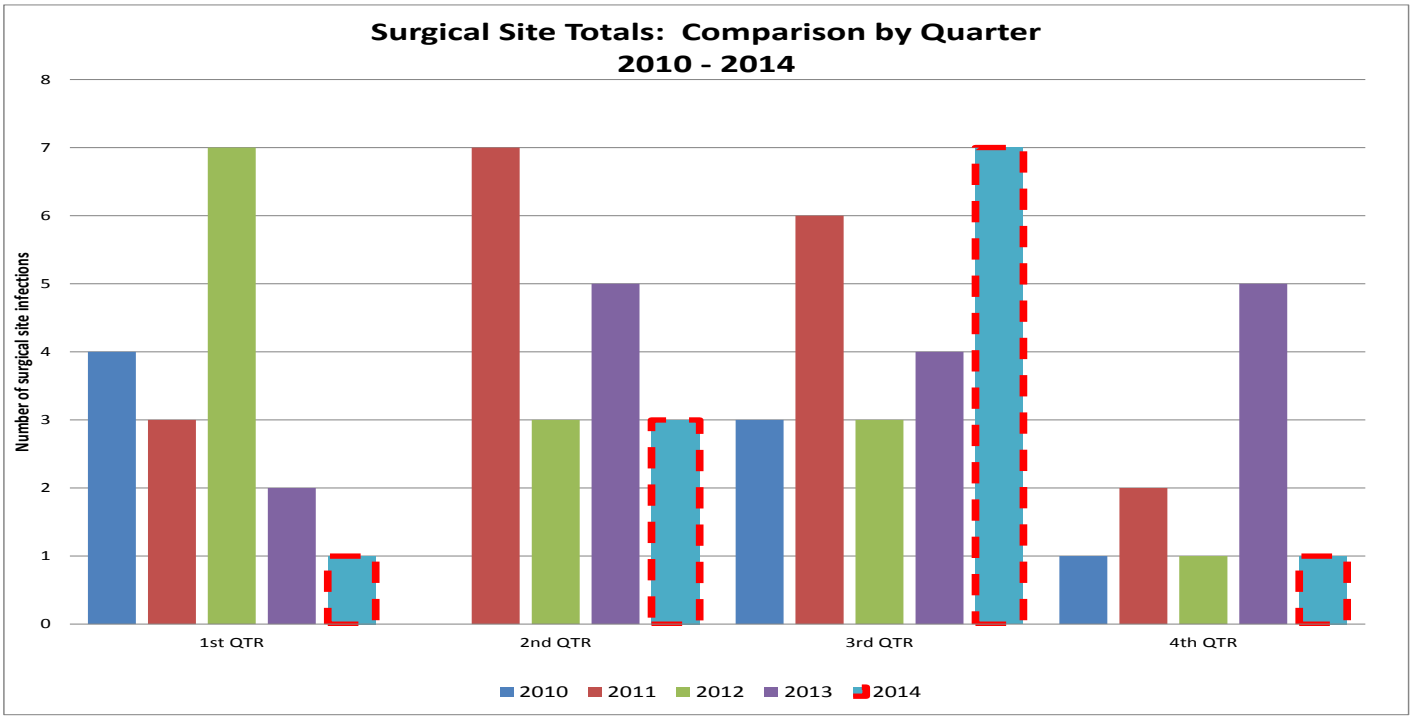
CMH Healthcare Team will provide an environment and patient care designed to reduce the opportunity for the development of surgical site infections.

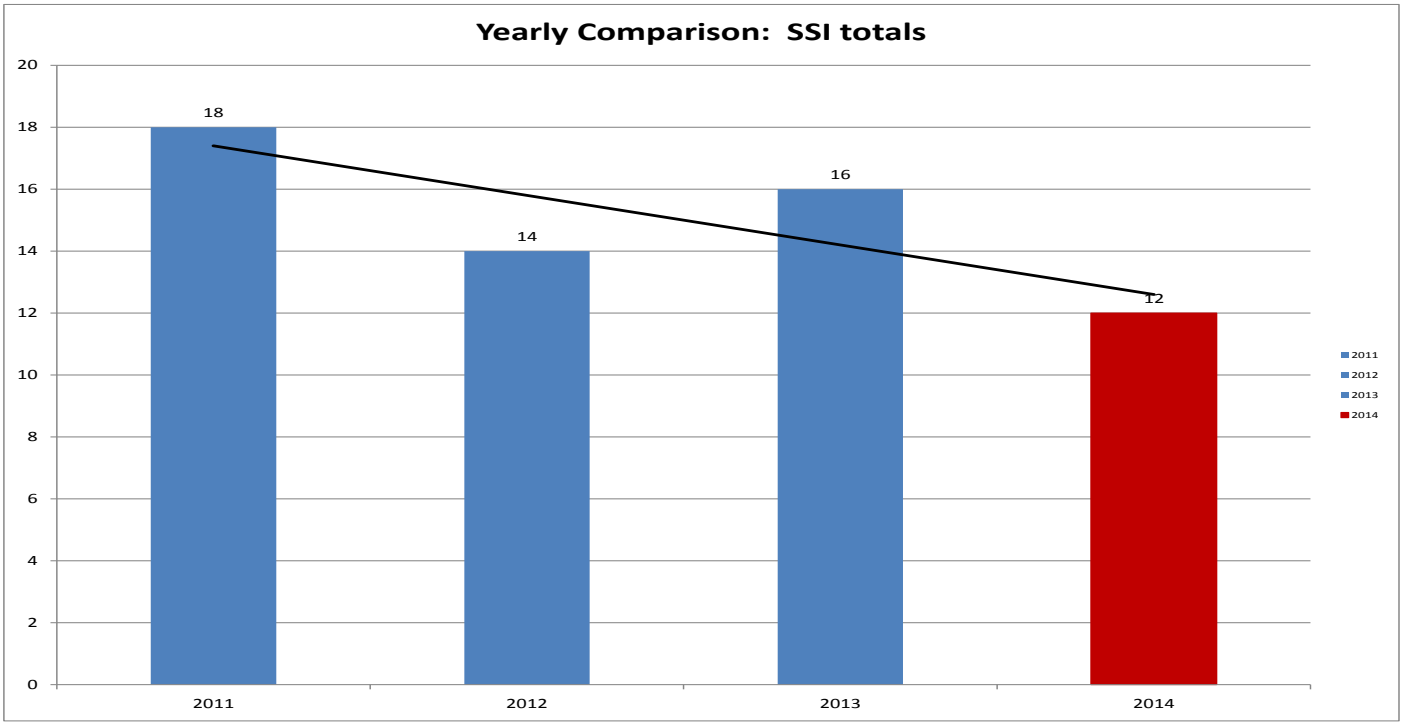
DO

2014:

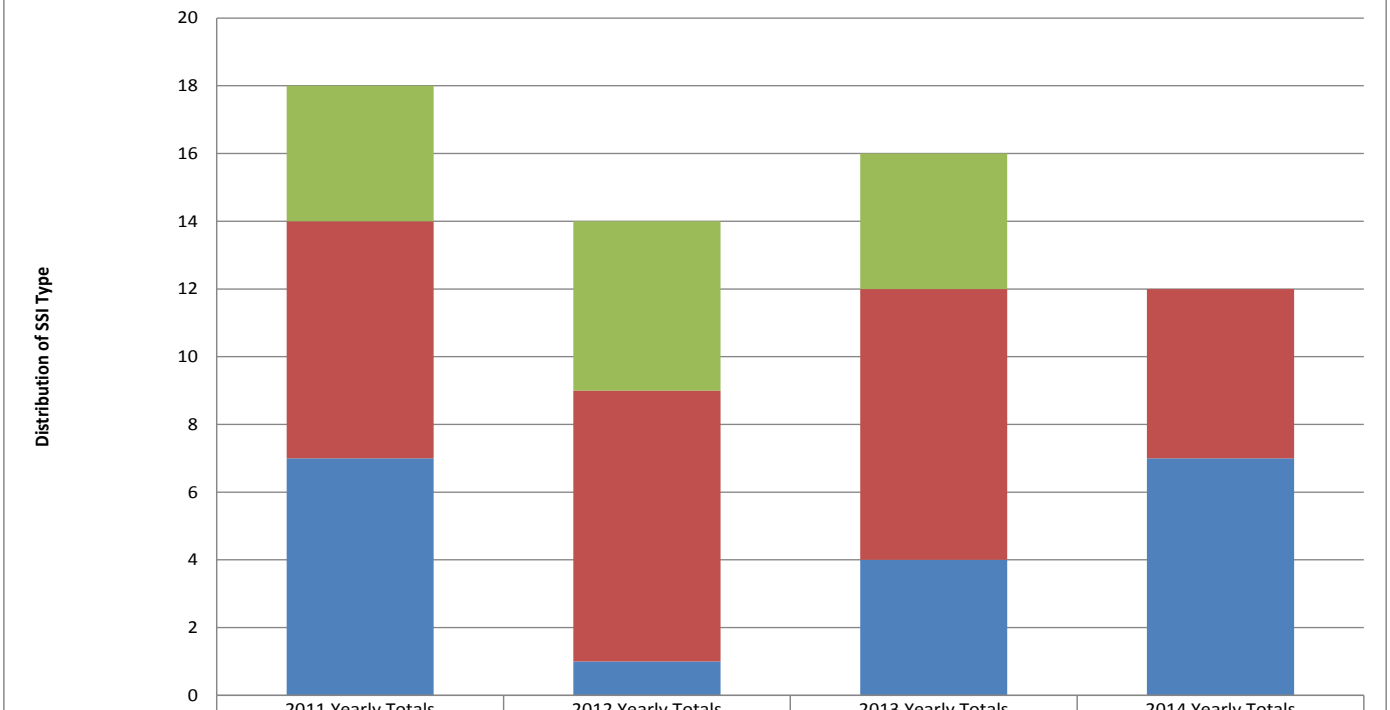
- ✓ Continue to trend by procedure and provider
- ✓ Extend sterilization times in CSP
- ✓ Implement customized table cover sets
- ✓ Replace all OR table padding
- ✓ Implement use of silver impregnated dressings
- ✓ Expand PCR testing for MRSA and MSSA
- ✓ Complete focused review of weight-based antibiotic dosing
- ✓ Revise preoperative order sets
- ✓ Renew focus on hand hygiene, sterile techniques and skin prep prior to surgery.
- ✓ Standardize OR skin preparation – double scrub

CHECK





Yearly Comparison of Superficial, Deep and Organ/Joint Space Surgical Site Infections



	2011 Yearly Totals	2012 Yearly Totals	2013 Yearly Totals	2014 Yearly Totals
Organ/Joint Space	4	5	4	0
Deep	7	8	8	5
Superficial	7	1	4	7

ACT

2014:

- ✓ Implemented shaved patients outside of the OR suite
- ✓ Implemented cast removal outside of the OR suite
- ✓ Implemented pre-cleaning and skin decontamination
- ✓ Sterile Processing Department consultation completed
- ✓ Expanded CHG bathing and nares screening for targeted procedures (ORIF & Fractures)
- ✓ Continued to focus on SSI preventions: environmental cleaning, hand hygiene, compliance of fingernail policy, and OR attire
- ✓ Budgeted for remediation of HVAC issues in Central Sterile and OR suites
- ✓ Reviewed and Implemented 3M clean trace environmental monitoring
- ✓ Reviewed use of portable UV disinfection system for OR
- ✓ Reviewed instrument processing procedures in Central Sterile
- ✓ Continued Infection Control rounds in OR
- ✓ Obtained washable medical keyboards for the OR
- ✓ Engaged surgeons in SSI reduction

Patient Flow

PLAN

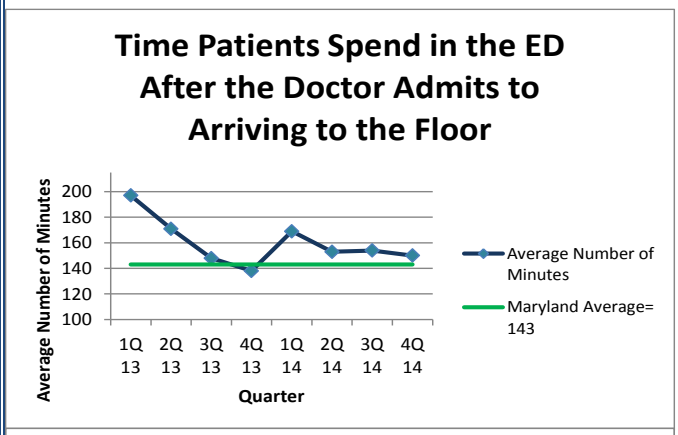
Assess and redesign patient flow experiences and procedures throughout the organization to ensure appropriate and safe levels of care, demonstrate efficient practices and decrease non-value added time and tasks for staff and patient

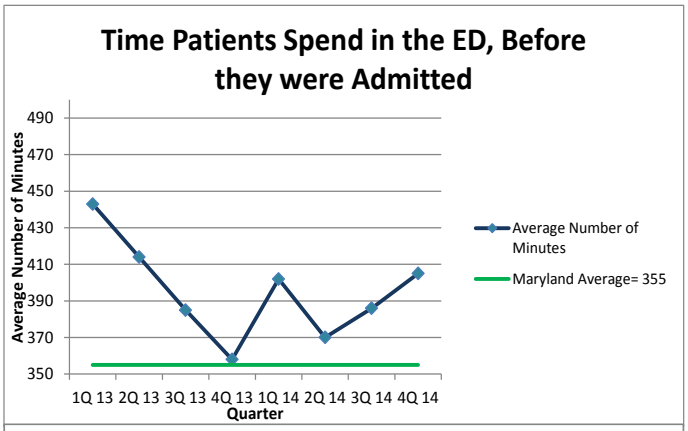
DO

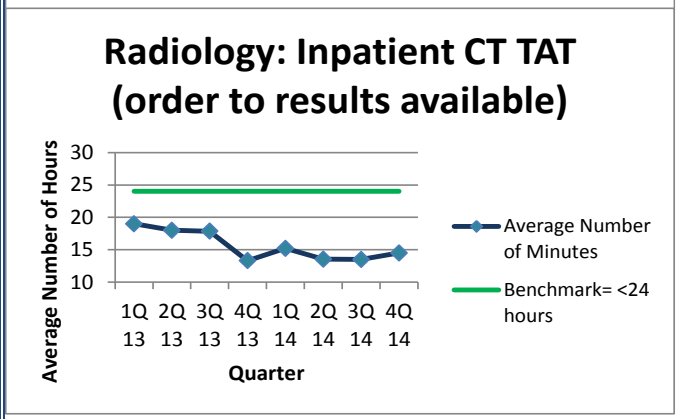
2014:

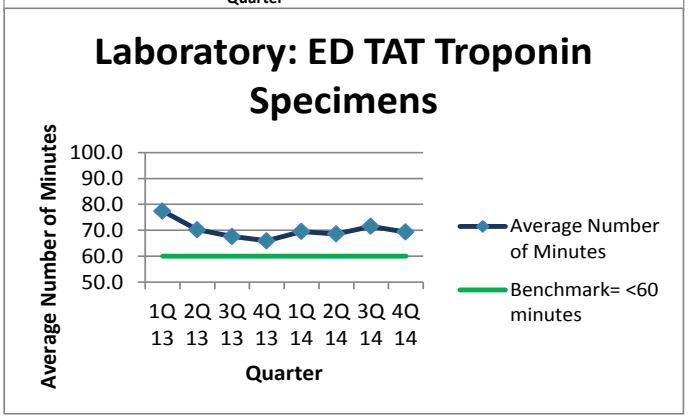
- ✓ Evaluate capacity to manage patient surge
- ✓ Participate in VHA ED throughput surveys
- ✓ Update Surge Policy and staff education
- ✓ Add a Behavioral Health representative to the team
- ✓ Develop I- STAT procedures
- ✓ Assess impact of psychiatric patient holds on ED workflow
- ✓ Evaluate compliance with new patient flow Joint Commission standard

CHECK









ACT

2014:

- ✓ The Surge Policy was updated, but not consistently followed. The surge management process needs further evaluation as evidenced by the repeated use of Code Yellow and Code Red
- ✓ The VHA survey revealed positive results for the left without being seen (LWOBS) and against medical advice (AMA) patient measures. CMH was at the benchmark for ED patient discharges. Additionally, opportunities for improvement were noted for the turn-around-time (TAT) of admitted patients' measure.
- ✓ Plans for an Observation Unit were postponed due to budgetary implications.
- ✓ New policies developed to address boarding of psychiatric patients in the ED and medical-surgical patients in a hold status.
- ✓ Successfully implemented TJC new patient flow standards